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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,262	05/18/1999	STANLEY DALE VIERK	A-66435/JAS/	4944

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05/09/2002

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EXAMINER

RESAN, STEVAN A

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 05/09/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/314262

Applicant(s)

VIENK et al

Examiner

RESAW

Group Art Unit

1773

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-3, 5, 7-9, 11-17, 19 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-3, 5, 7-9, 11-17, 19 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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1. The request filed on December 13, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/314262 is acceptable and a CPA has been established. An action on the CPA follows.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3, 5, 7-9, 11-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landin et al Re. 36,806 in view of McCormack 4,726,007 and Fujii JP 08-073676.

"Landin et al disclose a substrate for use in a data storage system comprising a plastic composite material wherein the plastic composite material may be a structural material selected from Markush Group of material which have a modulus of about 350 kpsi or greater and wherein the plastic composite material may be filled with viscoelastic damping particles and anisotropic reinforcing agents. See col. 3 lines 53-56. "The vibration damping material preferably include an amount of particulate material effective to improve vibration damping of the article or structural material of which the article is made...."; col. 3, lines 61 and 62, "combination of particulate and fibrous materials may be used, ..." col. 6, lines 1 and 2." Vibration damping material can include any material which is viscoelastic "col. 7 lines 23; col. 8, lines 25 describe anisotropic reinforcing agents i.e. fibrous material which include glass carbon fiber col. 8, line 5.

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McCormack is cited to demonstrate that glass fiber and/or carbon fiber filled material were used to assist in damping (col. 5, lines 38-44) as in claims 5 and 7. Polycarbonate was suitable as a damping material when compounded with appropriate fillers. McCormack teaches that a damper can be incorporated into a CD disk structure itself (col. 3, lines 62-66). While neither Landin or McCormack prefer a polycarbonate filled with viscoelastic damping particles. Fujii teaches vibration damping material in which polycarbonate is filled with iron oxide particles which are enclosed in a styrene-viscoelastic-styrene block as polymer resin. (Therefore the particles are viscoelastic-damping particles in a polycarbonate substrate in order to enhance the damping of the substrate and reinforce it with glass or carbon fibers to increase its modulus and at the same time further enhancing damping. The modulus of fiber reinforced polycarbonate would fall in applicants claimed range of greater than or equal to 350 kpsi as in claims 1 and 2.

Landin teach the use of core and/or skin layers and it would have been obvious one of ordinary skill in the art to regulate the laminate thickness and composition in order to optimize modulus, strength and damping. Formatting a disk with servo patterns and the use of the disk to prepare a magneto optical disk as in claims 11-13 is old in the art as evidenced by the references of record.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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5. Asahi is cited for teaching the incorporation of rubber polymer particles in rigid resins and the regulation of properties by blending two resins each having their own glass translation temperature.

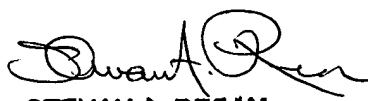
Okuda is cited for teaching a vibration damping polycarbonate composition containing a block copolymer and glass fibers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is (703) 308-4287. The examiner can normally be reached on Tuesday--Friday from 7:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 308-2351 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0611.

S.A. Resan/dh
May 8, 2002


STEVAN A. RESAN
PRIMARY EXAMINER